Calorimeter Electronics

E.J.Mannel 10-Feb-2016



Test Beam – Outstanding Issues

- Trigger Hodoscope:
 - UCLA- Has this been discussed with Oleg?
 - Fabricate our own?
 - Overall Dimensions (.5mm wide fingers)
 - SiPM readout using HCal preamps?
- Veto/Leakage Counters
 - Discussion with John H:
 - Large counters behind HCal- Identify leakage events
 - Small paddles around trigger hodoscope to veto halo events
 - Have discussed this with Mandy, still following up on details
 - Do we have materials within sPHENIX to make our own.
- Power for electronics when EMCal on MT6.2-B table
 - 220V cord for digitizer rack long enough?
 - Local 110V available

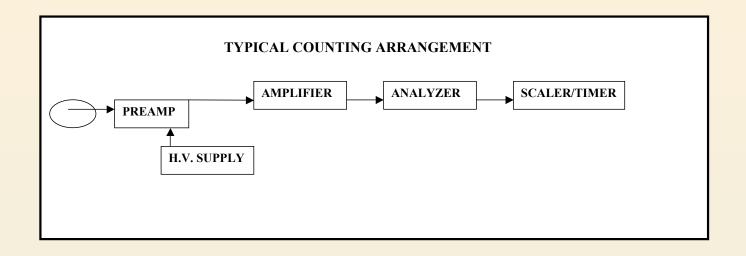


SiPMs and Neutrons

- 1008 Testing
 - BF3 tubes from Tom H are in Johns office
 - 2 Tubes, on encased on parafin.
 - Need readout electronics
 - Can we use the 3He tube readout?
 - Anything from instrumentation?
 - SiPMs/EMCal board illuminated with LED(s)?
 - Single SiPM for 5 channels
 - Multiple SiPMs for 1-2 channels
 - Readout using same channels as CAN in Run-15



From LND Inc



PREAMP- EG&G/ORTEC PC142

AMPLIFIER EG&G/ORTEC 570

HV SUPPLY BERTAN 315

ANALYZER CANBERRA ACCUSPEC A / MULTI PORT II

SCALER/TIMER EBERLINE SRM 100



The Short Term Schedule

- Next 2 weeks:
 - Get HCal wired up and running: LED/Cosmic triggers
 - Start assembling EMCal electronics
- Early March:
 - Assemble DCM-II Crate for new Digitizers
 - Assemble parts for new digitizer racks
 - Power Supplies: Bench or VICOR
 - AC requirements: 220V, 110V
 - Do we need a NIM bin or use one in HBD rack?
- March 23: Prep for shipping to FNAL
- March 28-30: Everything on the truck westward bound
- April 1: Test Beam activities start

